

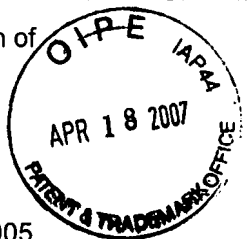
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Atty SCS-124-1102
Dkt.

IFW

MARSHALL et al



TC/A.U.

C# M#

2814

Serial No. 10/520,849

Examiner: M. Pizarro Crespo

Filed: January 11, 2005

Date: April 18, 2007

Title: PHOTODETECTOR CIRCUITS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

RESPONSE/AMENDMENT/LETTER

This is a response/amendment/letter in the above-identified application and includes an attachment which is hereby incorporated by reference and the signature below serves as the signature to the attachment in the absence of any other signature thereon.

☐ **Correspondence Address Indication Form Attached.****Fees are attached as calculated below:**

Total effective claims after amendment 27 minus highest number
previously paid for 27 (at least 20) = 0 x \$50.00 \$0.00 (1202)/\$0.00 (2202) \$

Independent claims after amendment 5 minus highest number
previously paid for 5 (at least 3) = 0 x \$200.00 \$0.00 (1201)/\$0.00 (2201) \$

If proper multiple dependent claims now added for first time, (ignore improper); add
\$360.00 (1203)/\$180.00 (2203) \$

Petition is hereby made to extend the current due date so as to cover the filing date of this
paper and attachment(s)
One Month Extension \$120.00 (1251)/\$60.00 (2251)
Two Month Extensions \$450.00 (1252)/\$225.00 (2252)
Three Month Extensions \$1020.00 (1253)/\$510.00 (2253)
Four Month Extensions \$1590.00 (1254)/\$795.00 (2254)
Five Month Extensions \$2160.00 (1255)/\$1080.00 (2255) \$

Terminal disclaimer enclosed, add \$130.00 (1814)/\$65.00 (2814) \$

☐ Applicant claims "small entity" status. ☐ Statement filed herewith

Rule 56 Information Disclosure Statement Filing Fee \$180.00 (1806) \$ 0.00

Assignment Recording Fee \$40.00 (8021) \$ 0.00

Other: \$ 0.00

TOTAL FEE \$ 0.00☐ **CREDIT CARD PAYMENT FORM ATTACHED.**

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140. A duplicate copy of this sheet is attached.

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NIXON & VANDERHYE P.C.
By Atty: Stanley C. Spooner, Reg. No. 27,393

Signature: 



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

MARSHALL et al

Atty. Ref.: 124-1102; Confirmation No. 2698

Appl. No. 10/520,849

TC/A.U. 2814

Filed: January 11, 2005

Examiner: M. Pizarro Crespo

For: PHOTODETECTOR CIRCUITS

* * * * *

April 18, 2007

Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

RESPONSE

Responsive to the Restriction Requirement mailed March 21, 2007 in the above-identified application, Applicants elect with traverse the invention of Group I, claims 1-17 and 24, directed to a photodetector circuit having an electrooptical junction.

The Examiner contends that the feature of Group I claims is the electrooptical junction and that this feature is not present in the Group II claims, i.e., claims 18-23 and 25. This contention is respectfully traversed. An electrooptical junction is by definition a junction formed between two different materials (usually two materials of different conductivity type, i.e., n or p type) which shows an electrical response in the presence of an optical stimulus or vice versa.

Applicants note that claim 18 recites first and second active regions of opposite conductivity types being implanted into the substrate. Those two opposite conductivity types are

implanted so as to “define an avalanche photodiode.” As a result, the subject matter of claim 18 falls within the scope of the common definition of electrooptical junction and therefore is a clearly linking single general inventive concept under PCT Rule 13.1.

In case the Examiner is relying only upon the inclusion of the words “electrooptical junction” and is ignoring the recited structure, it is noted that claim 12, which has been included in Group I, does not, like claim 18, specifically recite an “electrooptical junction.” Claim 12 does recite the elements, like claim 18, which provide an electrooptical junction. Since, the Examiner realizes that the magic words of “electrooptical junction” are not necessary for inclusion of claim 12 into the Group I invention, he should also include claims 18 and 19 (19 is dependent on 18).

As a minimum, Group I should include claims 1-19, although Applicants would argue that the recitation of photodetector in claim 20 and claims dependent thereon is sufficient for it to be included in Group I as well.

Accordingly, it is respectfully requested that reconsideration be granted with respect to the inclusion of claims 18 and 19 in the Group II invention, since they clearly fall within the Group I invention and have the common electrooptical junction characteristic.

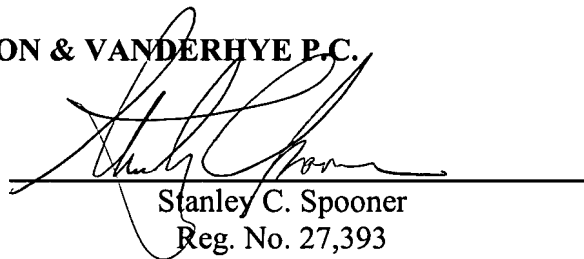
Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that the pending claims are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of any of the above claims, he is respectfully requested to contact Applicants’ undersigned representative.

MARSHALL et al
Appl. No. 10/520,849
April 18, 2007

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:



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